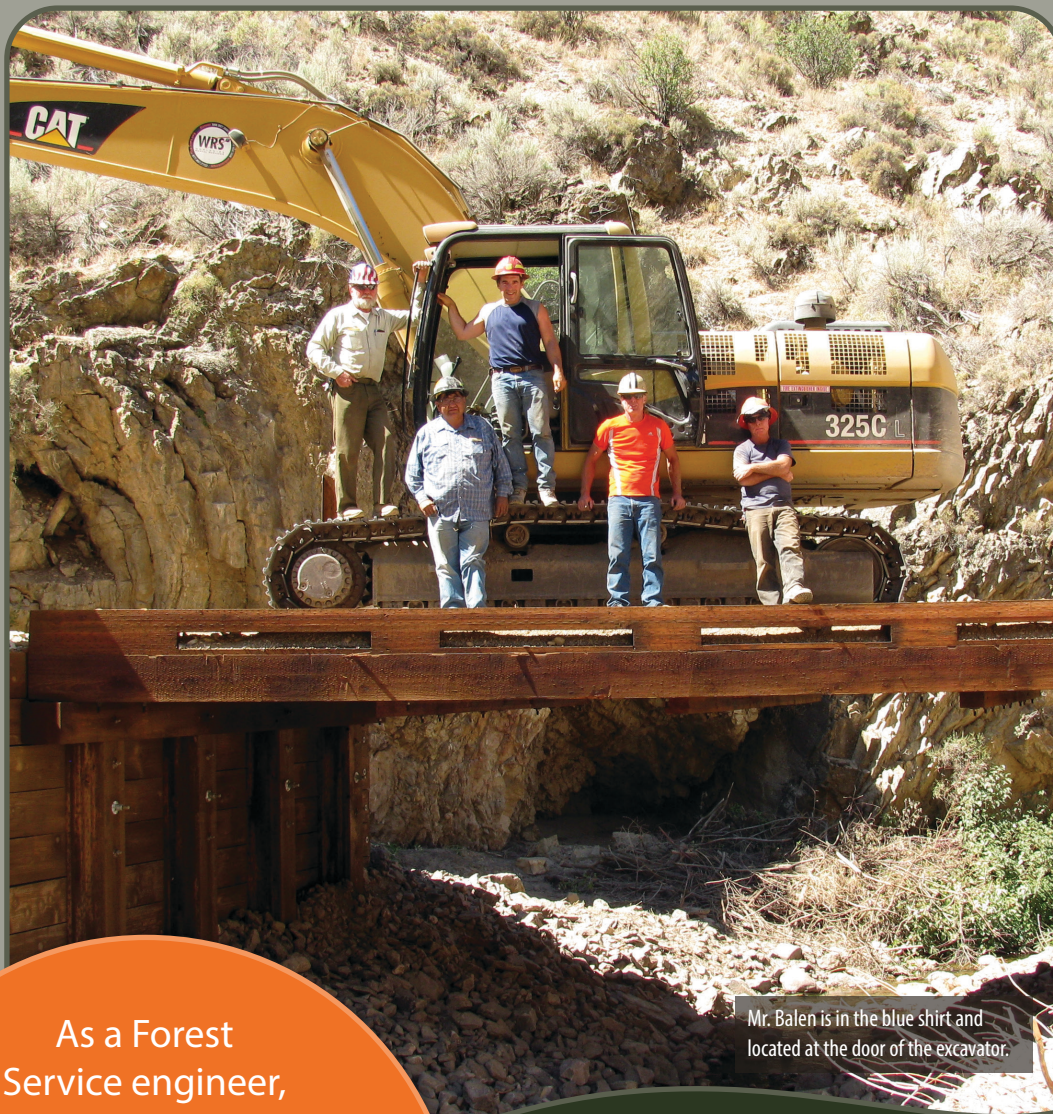




# Meet the Scientist!



Mr. Balen is in the blue shirt and located at the door of the excavator.

As a Forest Service engineer, I manage the built environment, including the roads, bridges and facilities, that connect people to the national forest landscape and enable Forest Service employees to do their jobs.

## Michael Balen Civil, Mining, and Geological Engineer

B.S., University of Alaska, Fairbanks  
USDA Forest Service engineer



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### Important Engineer Characteristics:

Important characteristics that enable me to do my work include the ability to work well with others, see the big picture, break large problems into manageable pieces, define achievable goals and objectives, develop logical plans to efficiently get things done, and creatively seek new ways to solve old problems that block the pathway to success.

**Example of a simple question I have tried to answer:** How can I improve a road to be more environmentally friendly? I developed means and methods to reconstruct roads in remote areas surrounded by sensitive habitat using special construction techniques. The work reduces erosion, replaces bridges and culverts that limit aquatic organism movement, enhances riparian function, and protects water resources from pollution.

### Technology or equipment used in my work:

I use heavy equipment to build bridges, stabilize stream banks, demolish unneeded buildings, improve stream passages for aquatic organisms, decommission unneeded roads, restore sensitive habitat areas, repair flood damage, construct flood management structures, and fight fires.

### Most Exciting Work

My most exciting work was completing 13 multi-million dollar improvement projects in the Spring Mountains National Recreation Area near Las Vegas, Nevada. The project involved 350 professional engineers plus dozens of contractors. Working together, we completed projects worth more than \$100 million, under budget and in four years.

### When did you know you wanted to be an engineer?

I discovered an interest in the natural world as a toddler. My parents loved the outdoors and took me camping. Trips to the mountains and seashores taught me about the world beyond the classroom. I knew early on that my life would be spent protecting these special places.

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